

# Implementation<sup>5</sup>

## 5.0 Overview

The physical, program, and policy recommendations in the previous two chapters provide the ingredients while the implementation strategy provides a guide to execute these recommendations in a successful manner. It contains the tools for the Town of Holly Springs to actively see this Plan through to its fruition. It is important for positive, successful action to take place in order to build momentum and support throughout the community. A dedicated effort towards implementation over the next 10 to 20 years will make the Town of Holly Springs a more pedestrian-friendly community, thus achieving the goals set out by this Plan. The implementation strategy, covered in this chapter includes opportunities and strategies, key action steps, project prioritization and phasing, recommended operations, staffing, and management practices, evaluation and monitoring program, and methods for acquisition and pedestrian facility development.



*Figure 5(a):  
The pedestrian system will ultimately  
inter-connect all trip attractors,  
including downtown Holly Springs.*

## 5.1 Opportunities and Strategies

The Town of Holly Springs has several opportunities that can help propel implementation. First, is the area's tremendous growth that will only continue. Policies, engineering, and design regarding new roads and developments should follow recommendations and design guidelines from this Plan to develop both on-road and off-road facilities. Where roadway construction and reconstruction projects occur, pedestrian facilities should be incorporated to reduce the overall cost of the system.

Second, is the existing network of sidewalks, greenways, and trip attractors. The Downtown area, schools, Womble Park and Bass Lake Park, and shopping centers are just some of the places people would like to walk to. Connecting all of these locations and filling gaps in the existing sidewalk network will serve to create a comprehensive, connected pedestrian system.

Third, is the local interest and numerous departments and agencies involved and interested in the development of this Plan. The organization



Figure 5(b):

*The Steering Committee, shown here at the Pedestrian Plan Kick-off Meeting, is the base group of people to form the Committee that sees implementation through.*

of active citizens, groups, clubs, schools, and the Town of Holly Springs will help advocate the pedestrian network development and stimulate volunteer efforts. **An inter-departmental coordinating committee, based from the Steering Committee formed during the formation of this Plan, should be formed to coordinate and oversee the implementation of this Plan which includes the development, operations, and maintenance of facilities.** This would function to continue communication and coordination between Town departments to ensure the integration of the sidewalk and greenway network. This committee would oversee the implementation of this Plan, develop programs, listen to community needs, promote the pedestrian network, review facility designs, and remain connected to adjoining municipality and regional pedestrian efforts. This committee should meet four times annually and include local citizens and staff from:

- Town of Holly Springs Planning & Zoning
- Town of Holly Springs Parks and Recreation
- Town of Holly Springs Engineering
- Town of Holly Springs Public Works Department
- CAMPO
- Wake County

## 5.2 Action Steps

The following Action Steps for implementation will guide the development of the proposed pedestrian network:

- Adopt this Plan. This should be considered the first step in implementation for Holly Springs. Through adoption of this document, the community is able to shape regional decisions so that they fit with the goals and recommendations of this Plan.
- Form the Inter-Departmental Committee described in above section to oversee, develop proper staffing, and promote implementation of the pedestrian system
- Secure the funding necessary to undertake the short term, top priority projects and develop a long term funding strategy to allow continued development of the overall system. Capital funds for sidewalk, crosswalk, and

greenway construction should be set aside for each year. Seek alternate federal, state, local, and private funding sources as well (described in Appendix D).

- Begin work on top priority projects listed in section 5.4.
- Begin acquiring land and easements necessary to complete priority greenway segments and provide connections between systems where there are gaps.
- Ensure that planning efforts are integrated with other municipalities' transportation planning efforts, as well as planning efforts at the county and state levels.
- Adopt sound policies and integrate strong pedestrian goals into future Town comprehensive and transportation planning efforts that enhance the Town's ability to develop pedestrian facilities as part of new development.
- Develop and implement education, encouragement, and awareness programs such as public events, which can be used to announce new walkways and upcoming projects and be a source of revenue.

An action schedule (Table 5.1) outlines more specifically the implementation steps for the Holly Springs Pedestrian Transportation Plan. It lists recommendations in the order presented in this Plan. It is intended as an initial guide but should be reviewed and updated as part of an evaluation and monitoring process described below.

### 5.3 Prioritization of Projects

The proposed pedestrian network for the Town of Holly Springs will likely be developed incrementally due to budget constraints and steady growth. This section describes how the recommended facilities are prioritized. Projects were prioritized by the following criteria:

- Ability to improve overall connectivity by filling pedestrian network gaps

Chapter	Recommendations	Lead Department/ Agency	Implementation Schedule		
			Short-term	Medium-term	Long-term
3	Begin developing/constructing network in order of priority and/or opportunity		✓		
	Develop x mile sidewalk system		←————→		
	Begin treatments/improvements to x identified intersection sites		✓		
	Develop x mile trail system		←————→		
4	Encourage the formation of a local pedestrian advocacy group		←————→		
	Produce a variety of safety materials for distribution to various age groups and at various events/locations		✓		
	Sponsor annual training sessions for Pedestrian Design/Review		←————→		
	Sponsor a session for new members of Law Enforcement focusing on Pedestrian Issues		←————→		
	Target and enforce all illegal motorist behavior that may jeopardize the success of the Town's Pedestrian Network		←————→		
	Require all Crossing Guards to complete a NCDOT Crossing Guard Training Program		←————→		
	Establish a local "Trail Patrol"		✓		
	Establish an Enforcement Hot line		✓		
	Encourage children to walk to school, safely, through a combination of programs, listed under encouragement resources		←————→		
	Establish awareness days		←————→		
	Establish self-guided walking tours to emphasize and showcase the historical, cultural, and environmental resources of Holly Springs		←————→		
	Establish art programs along pedestrian corridors		←————→		
	Encourage and support the creation of interest groups, clubs, and organizations that support the pedestrian system		←————→		

Table 5.1: Action Schedule

Chapter	Recommendations	Lead Department/ Agency	Implementation Schedule
5	Adopt the Plan		✓
	Form the Committee described in above section to oversee, develop proper staffing, and promote implementation of the pedestrian system		✓
	Secure the funding		←————→
	Begin work on top priority projects listed in section 5.4.		✓
	Begin acquiring land and easements necessary to complete priority greenway segments and provide connections between systems where there are gaps.		✓
	Ensure that planning efforts are integrated with other municipalities' transportation planning efforts, as well as planning efforts at the county and state levels.		↔
	Adopt sound policies and integrate strong pedestrian goals into future Town comprehensive and transportation planning efforts that enhance the Town's ability to develop pedestrian facilities as part of new development.		✓
	Develop and implement education, encouragement, and awareness programs such as public events, which can be used to announce new walkways and upcoming projects and be a source of revenue.		←————→
	Develop risk management strategy		✓
	Develop accurate and organized record-keeping process		↔
	Update signage, contact information, and educational/outreach materials at greenway facilities		↔
	Allocate a budget for operational and routine and remedial maintenance activities		←————→
	Obtain sustainable funding sources to meet the needs of the budget		←————→
	Maintain facilities in routine and remedial fashion		←————→
	Pursue TIP assistance to improve safety or fulfill facility needs		←————→

Table 5.1: Action Schedule

- Ability to improve safety and pedestrian options around schools, shopping centers, and residential areas
- Ability to serve underserved areas
- Ability to improve safety
- Utilization of routes suggested in previous planning efforts
- Utilization of routes recommended by public
- Consideration of future development patterns
- Opportunity such as future roadway construction or reconstruction, or easements with high potential in need of protection that are threatened with development pressure.

Specific variables used for a detailed prioritization scoring (described in Appendix B) are listed below:

- Elementary School Proximity -1/2 mile radius
- Middle School Proximity -1/2 mile radius
- High School Proximity -1/2 mile radius
- Direct Access to or from a School
- Parks, Recreation Centers, and Playgrounds Proximity - 1/2 mile radius
- Direct Access to/from Programmed Greenways
- Direct Access to/from Proposed Greenways
- Direct Access to/from High Density Residential
- Direct Access to/from Future Development
- Direct Access to/from Businesses/Shopping Centers
- Commercial Corridor – Main St. (Hwy 55), Holly Springs
- Point of Interest Proximity (1/2 mile radius) – Includes Womble Park and Bass Lake Park
- Regional and Citywide Connections - Includes links in and out of Holly Springs
- Connections to/from Downtown
- Connectivity to Existing Sidewalks – Based on sidewalk GIS layers developed by the Town of Holly Springs

Three phases for facility implementation are proposed as follows: the short term phase is 0-5 years; medium term phase is 5-10 years; long term phase is 10-20 years. A list of top priority action items have been pulled out of the first phase segments. Development efforts should occur within 0-3 years for these top priority, early-action items. These projects are specific improvements that will facilitate an immediate increase in connectivity, access, safety, and promotion of the network.

### Top Priority Network Projects

The top priority projects are those which ranked highest in the prioritization matrix (Appendix B) and/or presented unique opportunities to have an immediate impact.

## 5.4 Operations and Maintenance

Operations and maintenance refers to specific day-to-day tasks and programs performed to assure resources and facilities are kept in good usable condition. This begins with sound design, durable components, and a comprehensive management plan. A management plan should be embraced by the entities responsible for maintaining the pedestrian and greenway network, at the beginning of the implementation process. In addition, community groups, residents, business owners, developers and other stakeholders should be engaged in the long term stewardship of the resources preserved and enhanced by this plan.

### Guiding Principles for Effective Operations and Maintenance

The Holly Springs pedestrian network should be viewed and maintained as a public resource. It will become infrastructure similar to the street system or utility networks, serving the community for generations to come. The following guiding principles will help assure the preservation of a first class system:

- Good maintenance begins with sound planning and design
- Foremost, protect life, property and the environment



*Figure 5(c):  
Replacing greenway signage as necessary is  
an important remedial maintenance task.*

- Promote and maintain a quality outdoor recreation experience
- Develop a management plan that is reviewed and updated annually with tasks, operational policies, standards, and routine and remedial maintenance goals
- Maintain quality control and conduct regular inspections
- Include field crews, police and fire/rescue personnel in both the design review and on-going management process
- Maintain an effective, responsive public feedback system and promote public participation
- Be a good neighbor to adjacent properties
- Operate a cost-effective program with sustainable funding sources

### Operation and Maintenance Responsibilities

The pedestrian network should be operated and maintained by the Town of Holly Springs Public Works and Parks and Recreation Departments, NCDOT, and patrolled by the Town Police Department. A key to continued success will be the establishment and acceptance of pedestrian facility operations and maintenance guidelines and proper training of both supervisory and field personnel regarding on-road pedestrian facility upkeep. There should also be interagency coordination and user feedback protocols that assure timely response to citizen complaints and suggestions, including a website and toll-free hot line for pedestrian maintenance requests. Pedestrian signage should also be maintained by the Town of Holly Springs Public Works and Parks and Recreation Departments and NCDOT, depending on the types and locations of facilities. More specific department/staffing information is described below in Section 5.5.

### Operations Tasks

Key operation practices to include for greenway and pedestrian facilities include risk management, accurate and organized record keeping, updating informational signage and maps, and providing



contact information for facility users.

An effective risk management strategy is important, especially for greenways as the system is developed. It should include the following preventative measures:

- Schedule and document inspections to determine the amount of use, location, age, and condition of facilities. Follow-up with appropriate corrective measures if necessary.
- Evaluate and remove all obstacles or objects that could impede facility usage or pose danger and provide solutions such as alternative routing or obstacle removal.
- Implement a database management system of incidences (crimes and accidents) for tracking specific locations.
- Implement an emergency response protocol with law enforcement and EMS that includes mapping of access points, and an “address system” to identify locations for all off-road greenways. Where appropriate, 911 emergency phones should be installed. All EMS should have an updated map of all Town greenway and pedestrian facilities.

An accurate and organized record-keeping process is recommended to monitor tasks, identify levels of use, and prioritize management needs. Records should be kept of:

- Daily activities
- Schedule of routine and remedial maintenance tasks
- Hazards, incidents, and other safety items observed and action taken to address them
- Inspection reports
- Maintenance budgeting

The updating of signage, contact information, and information materials will enhance the quality of experience for greenway users. These include:

- Update information signage (rules and regulations) to

- communicate proper usage
- Update directional signage to integrate on-road and off-road facilities and direct users to trip attractors in Holly Springs
- Update user maps to reflect any changes or additions to the pedestrian network
- Provide contact information and agency response for facility users to report comments, concerns, and complaints regarding their pedestrian experience.
- Provide public education and encouragement programs (See Chapter 4)

		Sidewalk Frequency	Trail Frequency	Recommendations
Routine Maintenance Activities				
Facility Maintenance	Sweeping	2 times / year		
	Trash Removal	6 times / year		
Vegetation Management	Tree and Shrub Trimming and Pruning	During regular roadway maintenance	Spring and Fall and as needed, such as after a storm to maintain 8' high and 12'-14' wide clearance	
	Mowing of Vegetation	30 times / year		
	Mulching and Edging	N/A	once / year or as needed to maintain trail surface	
	Invasive Species Control	once / year and as needed in problem areas		

### Routine and Remedial Maintenance Tasks

**Routine maintenance** refers to the day-to-day regimen of litter pick-up, trash and debris removal, weed and dust control, trail sweeping, sign replacement, tree and shrub trimming, and other regularly scheduled activities. Routine maintenance also includes minor repairs and replacements such as fixing cracks and potholes or repairing a broken hand railing.

The following tasks should be performed on a regular basis to keep

		Sidewalk Frequency	Trail Frequency	Recommendations
Remedial Maintenance Activities				
Facility Repair or Replacement	Replenish gravel, mulch, or other surface materials	N/A	once / year and as needed to maintain trail surface	
	Repaint/Restripe/Stain	2-4 years		Crosswalks, pavement markings
	Replace asphalt or concrete	10-12 years		Includes repairing curb
	Remove encroaching debris along paved trail/sidewalk edges	As needed		
	Regrade to prevent or eliminate low spots and drainage issues	As needed		
	Addition or repair of culverts, bridges, boardwalks, retaining walls, etc. to prevent or eliminate drainage/erosion issues	As needed to maximize the projected life span of each (See Table 5 (x))		
	Repair of ancillary facilities such as signage, pedestrian signals, etc.	As needed		Replace burned out or broken signal heads and adjust timers to MUTCD standard walking speed

all network facilities in good, usable condition. Maintenance tasks should be conducted more frequently for pedestrian and greenway facilities where use is the most concentrated. Methods such as pedestrian counts, sketch plan analysis methods for estimating pedestrian demand, public survey results, and public meeting comments can be used to determine which resources are the most heavily used and may require the most maintenance attention. The frequency of required maintenance tasks should be established as new facilities are implemented and should be reviewed and updated



Figure 5 (d):  
Remedial Maintenance Activities

		Sidewalk Frequency	Trail Frequency	Recommendations
Remedial Maintenance Activities				
Habitat Enhancement and Control	Plant vegetation, such as trees and shrubs	Annual		Purchase of plant material should be part of the annual budget to provide shade trees downtown, enhance gateways, and reintroduce native species
	Apply herbicide to eliminate any problem areas	As needed to discourage growth of invasive species such as kudzu, poison ivy, etc.		
	Apply herbicide to maintain edges and prevent encroaching vegetation, such as along trails and sidewalks	As needed		
Seasonal Maintenance Activities				
Seasonal Maintenance	Remove leaf litter	As needed		Prioritize removal by the most heavily used facilities and geographic location.
	Remove snow and ice	As needed		